6. (Amended) A method of manufacturing a separator of a proton exchange fuel cell, comprising the steps of:

preparing a separator substrate; and

forming a multi-coating layer on said separator substrate by a process, capable of forming a thin film, selected from the group consisting of a physical evaporation process, a chemical evaporation process, a natride treating process, a boride treating process, a carbonizing process, a plating process and a spraying process.

14. (Amended) A method of manufacturing a separator of a proton exchange fuel cell; comprising the steps of:

preparing a separator substrate; and

forming a multi-coating layer on said separator substrate by a process, capable of forming a thin film, selected from the group consisting of a physical evaporation process, a chemical evaporation process, a nitride treating process, a boride treating process, a carbonizing process, a plating process and a spraying process;

removing said multi-coating layer electrically, mechanically or chemically, so that said multi-coating layer and said separator substrate are individually recovered; and

reusing material of said recovered multi-chating layer in manufacturing said separator of said-proton exchange fuel cell.

16. (Amended) A separator of a proton exchange fuel cell prepared by the method according to one of claims 6 or 14.